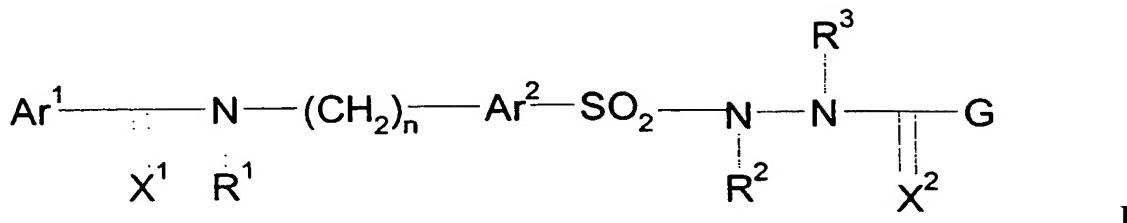


Claims

- #### 1. Sulfonyl hydrazide derivatives according to formula I



5 with its geometrical isomers, in an optically active form as enantiomers, diastereomers, as well as in the form of racemates, as well as pharmaceutically acceptable salts thereof, wherein

Ar^1 and Ar^2 are independently from each other an unsubstituted or substituted aryl or heteroaryl group,

10 X¹ and X² are independently from each other O or S;

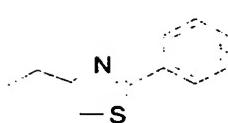
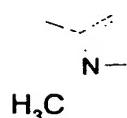
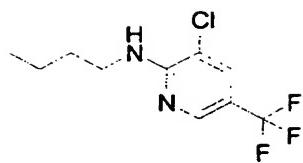
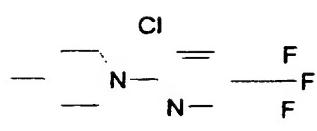
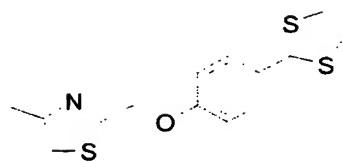
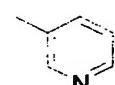
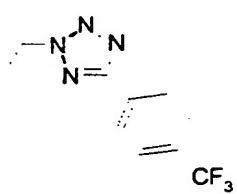
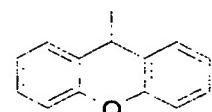
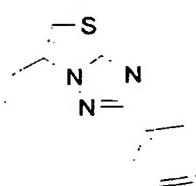
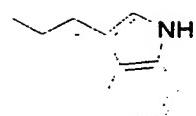
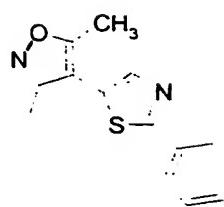
R^1 , R^2 , R^3 are independently from each other hydrogen or a C₁-C₆-alkyl substituent or R^1 forms a substituted or unsubstituted 5-6-membered saturated or unsaturated ring with Ar^1 ;

or R² and R³ form a substituted or unsubstituted 5-6-membered saturated or unsaturated ring;

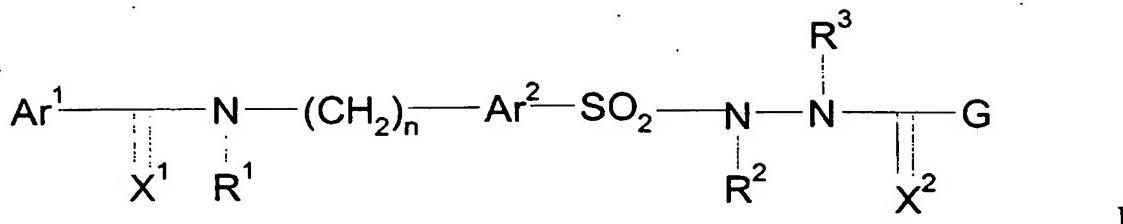
n is an integer from 0 to 5;

G is selected from a group comprising or consisting of an unsubstituted or substituted 4-8 membered heterocycle containing at least one heteroatom, or G is a substituted or unsubstituted C₁-C₆-alkyl group;

with the proviso that if Ar^1 is 4-chlorophenyl, Ar^2 is thienyl, X^1 and X^2 are O, R^1 , R^2 and R^3 are H, n is 1, G shall not be selected from the following group :



2. Sulfonyl hydrazide derivatives according to formula I



with its geometrical isomers, in an optically active form as enantiomers, diastereomers, as well as in the form of racemates, as well as pharmaceutically acceptable salts thereof, wherein

Ar¹ and Ar² are independently from each other an unsubstituted or substituted aryl or heteroaryl group,

X¹ and X² are independently from each other O or S;

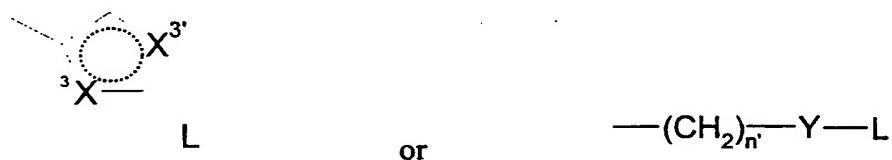
R¹, R², R³ are independently from each other hydrogen or a C₁-C₆-alkyl substituent or R¹ forms a substituted or unsubstituted 5-6-membered saturated or unsaturated ring with Ar¹;

or R² and R³ form a substituted or unsubstituted 5-6-membered saturated or unsaturated ring;

n is an integer from 0 to 5;

G is selected from a group comprising or consisting of an unsubstituted or substituted 4-8 membered heterocycle containing at least one heteroatom, or G is a substituted or unsubstituted C₁-C₆-alkyl group; for use as a medicament.

3. A sulfonyl hydrazide derivative according to claim 1 or 2, wherein G is either



wherein, both X³ and X^{3'} are selected independently from each other from the group consisting of N, O, S or CHL';

Y is O, S or NR⁴, whereby R⁴ is H or an unsubstituted or substituted C₁-C₆-alkyl, an unsubstituted or substituted aryl or heteroaryl;

n' is an integer from 0 to 5, preferably between 1-3 and most preferred 3;

L and L' are independently selected from the group comprising or consisting of H, unsubstituted or substituted C₁-C₆-aliphatic alkyl, unsubstituted or substituted C₂-C₆-alkenyl, unsubstituted or substituted C₂-C₆-alkynyl, unsubstituted or substituted cyclic C₄-C₈-alkyl, optionally containing 1-3 heteroatoms and optionally fused with aryl or heteroaryl; or L is an unsubstituted or substituted aryl or heteroaryl, aryl-C₁-C₆-alkyl, heteroaryl-C₁-C₆-alkyl, -C(O)-OR⁵, -C(O)-R⁵, -C(O)-NR⁵R⁵, -NR⁵R⁵, -NR⁵C(O)R⁵, -NR⁵C(O)NR⁵R⁵, -(SO)R⁵, -(SO₂)R⁵, -NSO₂R⁵, -SO₂NR⁵R⁵; whereby, R⁵ and R^{5'} are substituents being independently selected from the group comprising or consisting of H, unsubstituted or substituted C₁-C₆-alkyl, unsubstituted or substituted C₂-C₆-alkenyl, unsubstituted or substituted C₂-C₆-alkynyl, unsubstituted or substituted aryl, unsubstituted or substituted heteroaryl, unsubstituted or substituted aryl-C₁-C₆-alkyl, unsubstituted or substituted heteroaryl-C₁-C₆-alkyl; said aryl or heteroaryl groups being optionally substituted by unsubstituted or substituted C₁-C₆-alkyl, like trihalomethyl, unsubstituted or substituted C₁-C₆-alkoxy, unsubstituted or substituted C₂-C₆-alkenyl, unsubstituted or substituted C₂-C₆-alkynyl, amino, aminoacyl, aminocarbonyl, unsubstituted or substituted C₁-C₆-alkoxy-carbonyl, aryl, carboxyl, cyano, halogen, hydroxy, nitro, sulfoxy, sulfonyl, C₁-C₆-thioalkoxy.

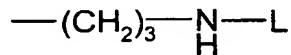
4. A sulfonyl hydrazide derivative according to any preceding claim, wherein Ar¹ and/or Ar² are independently selected from the group consisting of phenyl, thiienyl, furyl, pyridyl, pyrazolyl, pyrimidinyl, imidazolyl, naphthyl, quinolyl, optionally substituted by unsubstituted or substituted C₁-C₆-alkyl, in particular tri-halomethyl, unsubstituted or substituted C₁-C₆-alkoxy, unsubstituted or substituted C₂-C₆-alkenyl, unsubstituted or substituted C₂-C₆-alkynyl, amino, acylamino, amino-carbonyl, unsubstituted or substituted C₁-C₆-alkoxycarbonyl, aryl, carboxyl, cyano, halogen, hydroxy, nitro, sulfoxy, sulfonyl, C₁-C₆-thioalkoxy.

5. A sulfonyl hydrazide derivative according to any of the preceding claims, wherein Ar¹ is a substituted or unsubstituted phenyl, preferably 4-chlorophenyl, X¹ and X² are O, while R¹, R², R³ are all hydrogen, n is 1, Ar² is thienyl, G is selected from



5 whereby L is as above defined.

6. A sulfonyl hydrazide derivative according to any of the preceding claims, wherein G is



10 whereby L is as above defined, with most preferred groups L being substituted or unsubstituted pyridyl groups.

7. A sulfonyl hydrazide derivative according to claim 6, wherein L is a substituted or unsubstituted pyridyl group.

8. A sulfonyl hydrazide derivative according to any of the preceding claims selected from the following group :

- 15 4-chloro-N-[(5-{[2-({2-[4-(1,3-dithiolan-2-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 4-chloro-N- {[5-({2-[(2-phenyl-1,3-thiazol-4-yl)carbonyl]hydrazino}sulfonyl)thien-2-yl]methyl}benzamide
 4-chloro-N- {[5-({2-[(2-{[(4-chlorophenyl)sulfonyl]methyl}-1,3-thiazol-4-yl)carbonyl]hydrazino}sulfonyl)thien-2-yl]methyl}benzamide
 20 4-chloro-N- {[5-({2-[(2-methyl-1,3-thiazol-4-yl)carbonyl]hydrazino}sulfonyl)thien-2-yl]methyl}benzamide
 4-chloro-N- {[5-({2-[(4-(1H-pyrrol-1-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide

- 4-chloro-N-[(5-{{2-[(4,5-dichloro-1H-imidazol-1-yl)methyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 4-chloro-N-[(5-{{2-[(5-(trifluoromethyl)pyridin-2-yl)-1,3-thiazol-4-yl]carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 5 4-chloro-N-[(5-{{2-[(2-[3-chloro-5-(trifluoromethyl)pyridin-2-yl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 4-chloro-N-[(5-{{2-[(2-[2-chloro-4-(trifluoromethyl)phenyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 10 4-chloro-N-[(5-{{2-[(2-[4-(trifluoromethyl)pyridin-3-yl]-1,3-thiazol-4-yl)carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 4-chloro-N-[(5-[(2-[(2,3-dichlorophenyl)-1,3-thiazol-4-yl]carbonyl)-hydrazino]sulfonyl]thien-2-yl)methyl]benzamide
 4-chloro-N-{{5-[(2-[(2-furylmethyl)sulfonyl]methyl)-1,3-thiazol-4-yl]carbonyl}hydrazino]sulfonyl]thien-2-yl)methyl]benzamide
 15 4-chloro-N-[(5-{{2-[(2-chlorophenoxy)methyl]-1,3-thiazol-4-yl}carbonyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
 4-chloro-N-[(5-[(2-[(2,6-dichlorobenzyl)-1,3-thiazol-4-yl]carbonyl)hydrazino]sulfonyl]thien-2-yl)methyl]benzamide
 20 N-[(5-{{2-[(2-[4-(1,3-dithiolan-2-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide
 N-[(5-{{2-[(2-[4-(1,3-dithiolan-2-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
 N-[(5-{{2-[(2-[4-(1,3-dithiolan-2-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide
 25 N'-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-5-[(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)methyl]thiophene-2-sulfonohydrazide
 N-[(5-{{2-[(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-nitrobenzamide
 N-[(5-{{2-[(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-3-hydroxybenzamide
 30

- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-hydroxybenzamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
- 5 N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-furamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-thien-2-ylacetamide
- 10 N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-1-naphthamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-naphthamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-methylbenzamide
- 15 N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-ethylbenzamide
- 4-tert-butyl-N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-fluorobenzamide
- 20 N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-3-fluorobenzamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-fluorobenzamide
- 25 N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2,6-difluorobenzamide
- N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-3,5-difluorobenzamide
- 30 2-chloro-N-[(5-{{[2-(4-{{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide

- 3-chloro-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-iodobenzamide
5 2,6-dichloro-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
3,5-dichloro-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
2-bromo-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
10 3-bromo-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
4-bromo-N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide
15 N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-iodobenzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-3-nitrobenzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-nitrobenzamide
20 N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-(dimethylamino)benzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-3-methoxybenzamide
25 N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2-methoxybenzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-4-methoxybenzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}thien-2-yl)methyl]-2,6-dimethoxybenzamide
30

- N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-3,5-dimethoxybenzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-2-(trifluoromethyl)benzamide
5 N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-3-(trifluoromethyl)benzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-4-(trifluoromethyl)benzamide
10 N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-3,5-bis(trifluoromethyl)benzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]nicotinamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]isonicotinamide
15 4-amino-N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]benzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-4-hydroxybenzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-3,4-dihydroxybenzamide
20 3,4-diamino-N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]benzamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]pyridine-2-carboxamide
25 N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-6-hydroxypyridine-2-carboxamide
6-amino-N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]nicotinamide
N-[(5-{{2-(4-{{3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl}-hydrazino}sulfonyl}thien-2-yl)methyl]-2-sulfanylnicotinamide
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- N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-6-sulfanylnicotinamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2,6-dihydroxyisonicotinamide
5 N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-5-nitro-1H-pyrazole-3-carboxamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2-hydroxy-6-methoxybenzamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-8-hydroxyquinoline-7-carboxamide
10 2-amino-N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]nicotinamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-4-fluoro-3-nitrobenzamide
15 2-amino-N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]benzamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2,3,4-trihydroxybenzamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2-oxo-1,2-dihdropyridine-3-carboxamide
20 N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2,4-dihydroxybenzamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-5-hydroxypyridine-2-carboxamide
25 N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-2,4-dioxo-1,2,3,4-tetrahydropyrimidine-5-carboxamide
N-[(5- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino} butanoyl)-hydrazino]sulfonyl} thien-2-yl)methyl]-1H-imidazole-4-carboxamide

4-chloro-N-(4-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}benzyl)benzamide

4-chloro-N-(2-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}phenyl)benzamide

5 4-chloro-N-(3-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}phenyl)benzamide

N-(4-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}benzyl)-3-nitrobenzamide

10 4-chloro-N-(3-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}-butanoyl)hydrazino]sulfonyl}benzyl)benzamide

N-(3-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}benzyl)benzamide

N-(3-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}benzyl)-2-hydroxybenzamide

15 N-(3-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)-hydrazino]sulfonyl}benzyl)-3-nitrobenzamide

9. A sulfonamide derivative according to claim 8, which is selected from the group consisting of

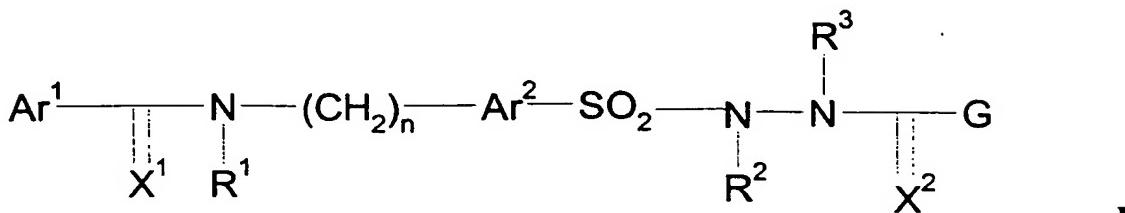
20 4-chloro-N-[(5-{[2-(4-(1,3-dithiolan-2-yl)phenyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide

4-chloro-N-[(5-{[2-(2-chlorophenoxy)methyl]-1,3-thiazol-4-yl}carbonyl)hydrazino]sulfonyl}thien-2-yl)methyl]benzamide

25 N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]-2-hydroxybenzamide
N-[(5-{[2-(4-{[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)hydrazino]sulfonyl}thien-2-yl)methyl]-2-oxo-1,2-dihydropyridine-3-carboxamide

4-chloro-N-(4- {[2-(4- {[3-chloro-5-(trifluoromethyl)pyridin-2-yl]amino}butanoyl)hydrazino]sulfonyl}benzyl)benzamide

10. Use of a sulfonyl hydrazide derivative according to formula I,



5

wherein

Ar^1 and Ar^2 are independently from each other an unsubstituted or substituted aryl or heteroaryl group;

X^1 and X^2 are independently from each other O or S;

10 R^1 , R^2 , R^3 are independently from each other hydrogen or a C₁-C₆-alkyl substituent or R^1 forms a substituted or unsubstituted 5-6-membered saturated or unsaturated ring with Ar^1 ;

or R^2 and R^3 form a substituted or unsubstituted 5-6-membered saturated or unsaturated ring;

15 n is an integer from 0 to 5;

G is selected from a group comprising or consisting of an unsubstituted or substituted 4-8 membered heterocycle containing at least one heteroatom, or G is a substituted or unsubstituted C₁-C₆-alkyl group;

20 for the preparation of a pharmaceutical composition for the modulation of the JNK pathways.

11. Use according to claim 10 for the treatment or prevention of disorders associated with the abnormal expression or activity of JNK.

12. Use according to claim 10 or 11 for the treatment or prevention of disorders associated with the abnormal expression or activity of JNK2 and/or 3.

13. Use of sulfonyl hydrazides according to formula I in particular according to any of claims 10 to 12 for the treatment of neuronal disorders including epilepsy, Alzheimer's disease, Huntington's disease, Parkinson's disease, retinal diseases, spinal cord injury, head trauma.

5 14. Use of sulfonyl hydrazides according to formula I in particular according to any of claims 10 to 12 for the treatment of autoimmune diseases including Multiple Sclerosis, inflammatory bowel disease (IBD), rheumatoid arthritis, asthma, septic shock, transplant rejection.

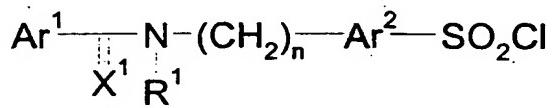
10 15. Use of sulfonyl hydrazides according to formula I in particular according to any of claims 10 to 12 for the treatment of cancer including breast-, colorectal-, pancreatic cancer.

16. Use of sulfonyl hydrazides according to formula I in particular according to any of claims 10 to 12 for the treatment of cardiovascular diseases including stroke, arterosclerosis, myocardial infarction, myocardial reperfusion injury.

15 17. A pharmaceutical composition containing at least one sulfonyl hydrazide derivative according to any of the claims 1 to 9 and a pharmaceutically acceptable carrier, diluent or excipient thereof.

18. Process for the preparation of the sulfonyl hydrazide derivatives according to any of the claims 1 to 9 comprising or consisting of the steps of

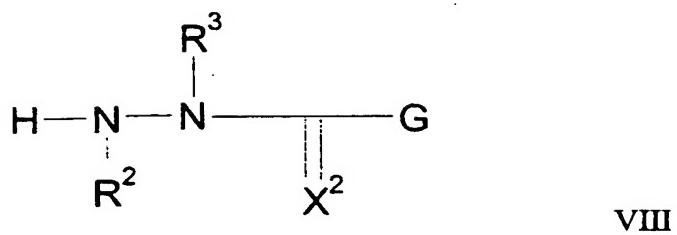
20 a) preparing a sulfonyl compound V



V

b) and reacting it with the hydrazide derivative VIII

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whereby the substituents Ar¹, Ar², R¹, R², R³, X¹, X² and G are as defined above.